A Forrester Total Economic Impact™ Study Commissioned By New Relic December 2019

The Total Economic Impact™ Of The New Relic Cloud Adoption Solution

Cost Savings And Business Benefits Enabled By The New Relic Cloud Adoption Solution



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Key Benefits



Deploy applications to the public cloud faster:

90% time savings 95% cost savings



Debug cloud applications more easily:

\$2.8 million PV



Rightsize public cloud infrastructure:

50% cost savings

Executive Summary

Cloud migration has exploded in popularity over the last few years as companies look not only for cost savings, but to focus on their core competencies. Forrester expects global spending on public cloud infrastructure to triple between 2018 and 2022 as companies move more applications into the public cloud. But not all applications are equally suited for cloud migration, and an understanding and assessment of an application portfolio are critical to support successful cloud migration.

New Relic provides a Cloud Adoption Solution (CAS) that helps its customers migrate applications into the public cloud. New Relic commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying New Relic's Cloud Adoption Solution. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the New Relic Cloud Adoption Solution on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed several customers with experience using New Relic to migrate and operate applications in the public cloud. These customers needed to understand application dependencies to move applications to the public cloud more easily and quickly. The customers looked for tools to make it easier and faster for their developers and infrastructure teams to troubleshoot and correct any cloud application performance issues. They also wanted to ensure the underlying public cloud infrastructure was appropriately provisioned and that they were not overpaying for excess public cloud capacity.

Prior to using the New Relic Cloud Adoption Solution, the customers found it risky and time-consuming to move applications into the public cloud, and they struggled to understand application dependencies. Public cloud migrations often resulted in application outages and errors. It was difficult to anticipate how an application would perform in the public cloud and how the end user would experience the application. The companies often overprovisioned their public cloud infrastructure to ensure adequate application performance.

Key Findings

Quantified benefits. The following risk-adjusted present value (PV) quantified benefits are representative of those experienced by the companies interviewed:

- > Deploy applications to the public cloud 90% faster with 95% lower cost. With CAS, organizations can deploy applications to the public cloud daily or several times a day instead of monthly. The deployment takes minutes, not hours, and can be managed by a small team, often just one person. By mapping application dependencies premigration, companies avoid errors and outages.
- Code cloud applications more quickly, \$2.1 million PV. Once companies have deployed New Relic CAS, cloud application developers can write cloud application code better and faster. The New Relic tools help the developers understand application dependencies and potential issues. Cloud application developers save 30% of the time they spent writing cloud application code. Overall, the organizations require fewer resources for cloud application development.





Benefits PV \$7.0 million



NPV \$4.6 million



Payback < 3 months

- Debug cloud applications more easily, \$2.8 million PV. With CAS, companies now measure time spent debugging cloud applications in minutes instead of days or weeks. An application residing in the public cloud could be causing performance issues or issues could be caused by the underlying public cloud infrastructure. New Relic's tools look across the companies' tech stacks and help the infrastructure teams and developers identify the source of each problem, speeding resolution.
- Right-size public cloud infrastructure and cut costs by 50%. The New Relic tools ensure that spending on public cloud infrastructure is only what is needed.

Unquantified benefits. The interviewed organizations experienced the following benefits, which are not quantified for this study:

- Realized the benefits of public cloud sooner. The New Relic CAS helps organizations move their applications into the public cloud more quickly. As the interviewed organizations moved applications into the public cloud, application availability, reliability, and scalability improved. The infrastructure teams closed data centers, saving costs. Companies needed fewer engineers to support cloud applications than their onpremises applications.
- > Simplified tech stack performance management. New Relic dashboards look across the tech stack. IT teams no longer need to jump between multiple dashboards or be trained on multiple tools; instead, they use a single New Relic dashboard.

Costs. The interviewed organizations experienced the following risk-adjusted PV costs:

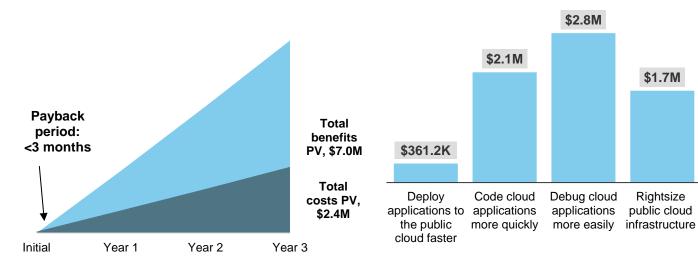
- New Relic license and services fees, \$1.6 million PV. The organizations use the New Relic tools for both application performance management (APM) and migration of applications to the public cloud. Forrester has prorated the representative cost of the New Relic annual license fee to reflect the amount of time the tools are used for application public cloud migration and optimization. On average, companies use the tools 30% of the time to support public cloud migration.
- Internal staff to support New Relic tools, \$821K PV. Internal staff support the New Relic platform and manage the public cloud rightsizing program.

Forrester's interviews with four existing customers and partners and subsequent financial analysis found that an organization based on these interviewed organizations experienced benefits of \$7.0 million over three years versus costs of \$2.4 million, adding up to a net present value (NPV) of \$4.6 million and an ROI of 191%.





Benefits (Three-Year)



TEI Framework And Methodology

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing New Relic Cloud Adoption Solution.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that New Relic Cloud Adoption Solution can have on an organization:



The TEI methodology

demonstrate, justify,

tangible value of IT

senior management

initiatives to both

and other key

stakeholders.

business

helps companies

and realize the

DUE DILIGENCE

Interviewed New Relic stakeholders and Forrester analysts to gather data relative to New Relic Cloud Adoption Solution.



CUSTOMER INTERVIEWS

Interviewed four organizations using Cloud Adoption Solution to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewed organizations.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organizations.



CASE STUDY

Employed four fundamental elements of TEI in modeling New Relic Cloud Adoption Solution's impact: benefits, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by New Relic and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the report to determine the appropriateness of an investment in New Relic Cloud Adoption Solution.

New Relic reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

New Relic provided the customer names and partner names for the interviews but did not participate in the interviews.



The New Relic Cloud Adoption Solution Customer Journey

BEFORE AND AFTER THE NEW RELIC CLOUD ADOPTION SOLUTION INVESTMENT

Interviewed Organizations

For this study, Forrester conducted four interviews with New Relic CAS customers and partners. Interviewed customers included the following:

- A US media company with \$12 billion in annual revenue and 15,000 employees. Approximately 500 employees use the New Relic tools.
- A US healthcare technology company with revenue of over \$3 billion and 15,000 employees. Multiple teams use the New Relic tools.
- A US medical device company with over \$1 billion in annual revenue and approximately 5,000 employees. Two hundred employees use the New Relic tools.
- A US technology consulting company and New Relic partner that helps companies plan and execute cloud migration using the New Relic tools.

Key Challenges

The interviewed companies faced multiple challenges as they worked to shift applications to the public cloud from on-premises data centers.

- > The cloud migration team found it risky and time-consuming to deploy applications into the public cloud, so deployments were only on a monthly basis. A migration of an application into the public cloud could result in problems and a need to rework the application. Companies struggled with mapping application dependencies to ensure interlinked apps were migrated together.
- Cloud migration teams had limited visibility into how applications would perform in the cloud. Companies could test applications, but they could not fully understand the end user experience. This created a risk that the end user experience could be slow or below user expectations.
- Application developers spent a lot of time fixing and responding to problems with cloud applications. Troubleshooting was difficult since there wasn't a way to see into the full stack to identify the source of the problem.
- Infrastructure teams found it difficult to plan for and estimate application load sizing in the public cloud. This resulted in overprovisioning of public cloud infrastructure resources.

"When we started our cloud migration transformation, we were looking to solve some internal problems. We had too many tools, multiple tools monitoring the same thing. Our goal was to simplify our ecosystem and make it faster for our development team to get products to market faster. New Relic was able to simplify that ecosystem for us. It was able to give us the real-time metrics that we wanted."

Sr. director of cloud architecture and engineering, media



Key Results

The interviews revealed several key results from the New Relic Cloud Adoption Solution investment:

- With New Relic, organizations can deploy applications into the public cloud more quickly. Deployments are now daily or several times a day instead of monthly. Each deployment now takes minutes, not hours, and can be managed by a small team, often just one person. By mapping application dependencies premigration, companies avoid errors and outages.
- Cloud application developers can now write code better and faster. Time spent on application coding decreases, and companies require fewer internal resources for application development.
- New Relic helps the developers and operations team understand the end users' experience. If a cloud application is slow or not meeting users' expectations, New Relic's tools make troubleshooting easy by identifying the root cause of the problem.
- Mean-time-to-resolution decreases. Companies now measure time spent debugging cloud applications in minutes instead of days or weeks.
- The underlying public cloud application infrastructure is now rightsized. Spending on public cloud infrastructure decreases and is now more efficient.
- > By moving to the public cloud more quickly with New Relic, the organizations realized the benefits of public cloud sooner. Public cloud application availability, reliability, and scalability improved. The infrastructure team closed data centers, saving costs. Companies needed fewer engineers to support cloud than their on-premises applications. While some traditional IT roles were eliminated, many of the staff transitioned to public cloud support roles.

Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. The composite organization is representative of the four companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews has the following characteristics:

Description of composite. A US-headquartered enterprise with 5,000 employees and \$10 billion in annual revenue.

"By better understanding the dependencies, you reduce the amount of outages and downtime during the migration of a particular workload."

Principle consultant, technology consulting



Key assumptions 350 New Relic users

1,000 applications in the public cloud Growing public cloud use 20% annually



> Deployment characteristics. The organization has 350 employees who use the New Relic tools: 25 users manage the migration of applications into the public cloud, 250 users are application developers, and 75 users are part of the infrastructure team. The organization is moving its applications from its on-premises data centers to the public cloud. The organization currently has 1,000 applications in the public cloud and expects that to increase by 20% annually over the next three years. The company's applications are complex and sophisticated, and there are typically application interdependencies. The organization uses New Relic application performance management (APM) tools and leverages the information from the APM tools to facilitate the public cloud migration.

Analysis Of Benefits

QUANTIFIED BENEFIT DATA AS APPLIED TO THE COMPOSITE

Tota	ıl Benefits					
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Deploy applications to the public cloud faster	\$146,966	\$145,249	\$143,208	\$435,424	\$361,241
Btr	Code cloud applications more quickly	\$843,750	\$843,750	\$843,750	\$2,531,250	\$2,098,281
Ctr	Debug cloud applications more easily	\$1,142,578	\$1,142,578	\$1,142,578	\$3,427,734	\$2,841,423
Dtr	Rightsize public cloud infrastructure	\$375,000	\$720,000	\$1,080,000	\$2,175,000	\$1,747,370
-	Total benefits (risk-adjusted)	\$2,508,295	\$2,851,577	\$3,209,536	\$8,569,408	\$7,048,315

Deploy Applications To The Public Cloud Faster

With New Relic, interviewed organizations can deploy applications into the public cloud more quickly — daily or several times a day instead of monthly. The deployment now takes minutes, not hours, and can be managed by a small team, often just one person. By mapping application dependencies premigration, companies avoid errors and outages.

Forrester modeled this benefit for the composite organization:

- New Relic helped the cloud migration team map application dependencies premigration. This helped avoid errors, outages, and rework during the application migration process.
- Before New Relic, the organization required a large team of 25 people to manage the migration of an application into the public cloud. The large team needed to be on hand to resolve any issues or complications. The migration process took many hours.
- With New Relic, deployment of an application into the public cloud became automated. Only a single person was required to manage the process.

Forrester estimated the improvement in the time and resources it took to move applications into the public cloud:

- Before New Relic, the organization required a team of 25 people to move an application into the public cloud. The migration process took 8 hours on average.
- With New Relic, the organization required only one person to manage the migration of an application into the public cloud The migration was automated and took 0.5 hours on average.
- Before New Relic, the organization deployed only one application a month to the public cloud. With New Relic, the organization could deploy applications to the public cloud daily and often multiple times per day.

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to be a PV of more than \$7.0 million.

"We did our first cloud application deployment with New Relic, and everything went great. Literally there were no problems. People were still a bit skeptical, but we did another cloud application deployment a few weeks later with the same results. It started to snowball from that point. Everybody wanted to go to the cloud. It's been a success story for us since that point."

Sr. director of cloud architecture and engineering, media





- The average fully loaded annual cloud migration team salary was \$150,000.
- The cloud migration team converted 50% of the hours saved into productive time.

The improvement in time and cost to move applications to the public cloud will vary with:

- The number and complexity of applications migrated to the public cloud.
- The extent to which the applications are reengineered for the cloud vs. a lift-and-shift approach.
- > The skill and experience of the cloud migration team.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year risk-adjusted total PV of \$361,241.

Impact risk is the risk that the business or technology needs of the organization may not be met by the investment, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for benefit estimates.

Deplo	Deploy Applications To The Public Cloud Faster: Calculation Table					
Ref.	Metric	Calculation	Year 1	Year 2	Year 3	
A1	Applications deployed to the public cloud before New Relic (per year)	One per month	12	12	12	
A2	Time to deploy each application (hours)		8	8	8	
A3	Cloud deployment team (FTEs)		25	25	25	
A4	Cloud deployment team (cost per hour)	\$150,000 fully loaded salary/2,080 hours (rounded)	\$72	\$72	\$72	
A5	Cost to deploy applications to the public cloud before New Relic	A1*A2*A3*A4	\$172,800	\$172,800	\$172,800	
A6	Applications deployed to the public cloud with New Relic (per year)	One per business day, growing 20% annually	264	317	380	
A7	Time to deploy each application (hours)		0.5	0.5	0.5	
A8	Cloud deployment team (FTEs)		1	1	1	
A9	Cloud deployment team (cost per hour)	\$150,000 fully loaded salary/2,080 hours (rounded)	\$72	\$72	\$72	
A10	Cost to deploy applications to the public cloud with New Relic	A6*A7*A8*A9	\$9,504	\$11,412	\$13,680	
At	Deploy applications to the public cloud faster	A5-A10	\$163,296	\$161,388	\$159,120	
	Risk adjustment	↓10%				
Atr	Deploy applications to the public cloud faster (risk-adjusted)		\$146,966	\$145,249	\$143,208	



Code Cloud Applications More Quickly

With the New Relic CAS, cloud application developers can write cloud application code better and faster. The New Relic tools help the developers understand application dependencies and potential issues and troubleshoot problems. Teams require fewer steps to check the code, so the entire process moves more quickly. Overall, the organizations require fewer resources for cloud application development.

For the composite organization, Forrester assumed that:

- Two hundred and fifty developers used New Relic and spent 20% of their time coding new cloud applications.
- The New Relic data helped them save 30% of the time they spent on cloud application coding.
- The average fully loaded annual developer salary was \$150,000.
- The developers converted 50% of the hours saved into productive time.

The reduction in cloud application coding expense will vary with:

- > The number of new cloud applications.
- > The number of cloud application developers.
- > The fully loaded compensation of cloud application developers.

To account for these risks, Forrester adjusted this benefit downward by 25%, yielding a three-year risk-adjusted total PV of \$2,098,281.

"We develop software, but if we cannot monitor the software and really see, understand, experience the value we are providing, we are flying blind. New Relic is very integral to the whole application development, deployment, and ownership."

VP, healthcare technology



Code	Cloud Applications More Quickly: Calculation	Table			
Ref.	Metric	Calculation	Year 1	Year 2	Year 3
B1	Developers using New Relic, FTEs		250	250	250
B2	Percent of time coding new cloud applications		20%	20%	20%
В3	Time savings with New Relic		30%	30%	30%
B4	Annual salary, fully loaded		\$150,000	\$150,000	\$150,000
B5	Productivity recapture		50%	50%	50%
Bt	Code cloud applications more quickly	B1*B2*B3*B4*B5	\$1,125,000	\$1,125,000	\$1,125,000
	Risk adjustment	↓25%			
Btr	Code cloud applications more quickly (risk-adjusted)	<u> </u>	\$843,750	\$843,750	\$843,750

Debug Cloud Applications More Easily

If the cloud application is slow or not meeting users' expectations, New Relic's tools make troubleshooting easy by identifying the root cause of the problem. New Relic offers a "single pane of glass" that looks across the tech stack.



When an application resides in the public cloud, it can be challenging to determine what is causing performance issues. The problem could be with the application or with the underlying public cloud infrastructure. New Relic's tools look across the tech stack and help the infrastructure teams and developers identify the source of the problem.

This visibility across the tech stack speeds the debugging effort. Organizations now measure time spent debugging cloud applications in minutes instead of days or weeks.

For the composite organization, Forrester assumed that:

- Three hundred and twenty-five developers and infrastructure specialists used the New Relic tools to resolve issues and debug the applications.
- The New Relic data helped the teams save 25% or more of their time spent on debugging.
- The average fully loaded annual developer and infrastructure specialist salary was \$150,000.
- > The teams converted 50% of the hours saved into productive time.

The reduction in cloud application debugging expense will vary with:

- > The number issues with cloud applications.
- The fully loaded compensation of cloud application developers and infrastructure team specialists.

To account for these risks, Forrester adjusted this benefit downward by 25%, yielding a three-year risk-adjusted total PV of \$2,841,423.

"The debugging effort takes days and weeks down to minutes now. The time savings is massive, and that equates to a lot of cost savings in terms of developer hours. Because now, instead of debugging the system, they can focus on upcoming features."

Development operations director, medical device manufacturer



Debu	Debug Cloud Applications More Easily: Calculation Table						
Ref.	Metric	Calculation	Year 1	Year 2	Year 3		
C1	Developers and infrastructure team using New Relic (FTEs)		325	325	325		
C2	Percent of time debugging and fixing cloud application issues		25%	25%	25%		
C3	Time savings with New Relic		25%	25%	25%		
C4	Annual salary, fully loaded		\$150,000	\$150,000	\$150,000		
C5	Productivity recapture		50%	50%	50%		
Ct	Debug cloud applications more easily	C1*C2*C3*C4*C5	\$1,523,438	\$1,523,438	\$1,523,438		
	Risk adjustment	↓25%					
Ctr	Debug cloud applications more easily (risk-adjusted)		\$1,142,578	\$1,142,578	\$1,142,578		

Rightsize Public Cloud Infrastructure

Before New Relic, infrastructure teams struggled to anticipate how an application would perform in the cloud. If the underlying public cloud infrastructure was inadequate, the end user could have an unresponsive



or slow experience, potentially growing frustrated and leaving the application. This often resulted in an overprovisioning of public cloud infrastructure to ensure a good user experience. Now, the New Relic tools ensure that spending on public cloud infrastructure is only what is needed.

For the composite organization, Forrester assumed that:

- The organization spent \$2 million annually on public cloud infrastructure. This spending increased 20% annually as new applications were deployed in the public cloud.
- The company used the New Relic data to identify public cloud overprovisioning.
- The company cut its public cloud spending by 50% over a three-year period. The organization identified the more obvious overprovisioning (the low-hanging fruit) in Year 1.

The reduction in public cloud infrastructure expense will vary with:

- Overall spending on public cloud infrastructure.
- The extent of initial public cloud overprovisioning.
- The ability and willingness to dedicate internal resources to the rightsizing effort.

To account for these risks, Forrester adjusted this benefit downward by 25%, yielding a three-year risk-adjusted total PV of \$1,747,370.

"The New Relic insights, not just real-time but also historical, have been very helpful for us to do planning for our public cloud. What kind of instances do we need? How much storage do we need? Are we underutilizing our CPUs? Should we be going to smaller instances?"

VP, healthcare technology



Right	size Public Cloud Infrastructure: Calculation T	able			
Ref.	Metric	Calculation	Year 1	Year 2	Year 3
D1	Spending on public cloud infrastructure before New Relic	Growing 20% annually	\$2,000,000	\$2,400,000	\$2,880,000
D2	Incremental reduction in overprovisioning		25%	15%	10%
D3	Cumulative reduction in overprovisioning		25%	40%	50%
Dt	Rightsize public cloud infrastructure	D1*D3	\$500,000	\$960,000	\$1,440,000
	Risk adjustment	↓25%			
Dtr	Rightsize public cloud infrastructure (risk-adjusted)		\$375,000	\$720,000	\$1,080,000

Unquantified Benefits

New Relic's Cloud Adoption Solution provides additional unquantified benefits. Interviewed organizations:

Realized the benefits of public cloud sooner. The New Relic CAS helps organizations move their applications into the public cloud more quickly. As the interviewed organizations moved applications into the public cloud, application availability, reliability, and scalability improved. The infrastructure teams closed data centers, saving costs. Companies needed fewer engineers to support cloud applications than their onpremise applications. While some traditional IT roles were eliminated, many of the staff transitioned to public cloud support roles.



Simplified tech stack performance management. New Relic dashboards look across the tech stack. IT teams no longer need to jump between multiple dashboards or be trained on multiple tools; instead, they can use the New Relic dashboard.

Flexibility

The value of flexibility is clearly unique to each customer, and the measure of its value varies from organization to organization. There are multiple scenarios in which a customer might choose to implement New Relic CAS and later realize additional uses and business opportunities, including:

- **Cloud optimization.** New Relic helps plan a cloud migration effort, but once the applications reside in the cloud, it also helps manage and optimize the applications.
- Sunsetting on-premises applications. While some companies continue to run applications both on-premises and in the public cloud, the New Relic data on the performance of public cloud applications can be used to justify shutting down legacy on-premises applications.

Flexibility would also be quantified when evaluated as part of a specific project.

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for a future additional investment. This provides an organization with the "right" or the ability to engage in future initiatives but not the obligation to do so.



Analysis Of Costs

QUANTIFIED COST DATA AS APPLIED TO THE COMPOSITE

Tota	al Costs						
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	New Relic license fee (prorated) and cloud-related professional services	\$57,500	\$517,500	\$621,000	\$745,200	\$1,941,200	\$1,601,057
Ftr	Internal staff to support New Relic	\$0	\$330,000	\$330,000	\$330,000	\$990,000	\$820,661
	Total costs (risk-adjusted)	\$57,500	\$847,500	\$951,000	\$1,075,200	\$2,931,200	\$2,421,718

New Relic License Fee (Prorated) And Cloud-Related Professional Services

The composite organization paid New Relic an annual license fee:

- The organization used the New Relic tools for both APM and migration of applications to the public cloud. Forrester prorated the representative cost of the New Relic annual license fee to reflect the amount of time the tools are used for application migration to the public cloud and application optimization. The tools were used 30% of the time to support public cloud migration.
- The cost of the New Relic license increased by 20% each year as the tools were used to monitor more applications and as more applications were moved into the public cloud.
- ➤ The organization spent \$50,000 on New Relic professional services to help start the cloud migration process.

The cost will vary based on:

- The specific New Relic pricing model, for example by agent, by transaction.
- > New Relic features selected by the organization.

To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year risk-adjusted total PV of \$1,601,057.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total costs to be a PV of more than \$2.4 million.

Implementation risk is the risk that a proposed investment may deviate from the original or expected requirements, resulting in higher costs than anticipated. The greater the uncertainty, the wider the potential range of outcomes for cost estimates.



New I	New Relic License Fee (Prorated) And Cloud-Related Professional Services: Calculation Table						
Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3	
E1	New Relic license fees	Growing 20% annually		\$1,500,000	\$1,800,000	\$2,160,000	
E2	Percent of New Relic user time supporting cloud migration and optimization			30%	30%	30%	
E3	Prorated New Relic license fee	E1*E2		\$450,000	\$540,000	\$648,000	
E4	Professional services to support cloud migration		\$50,000				
Et	New Relic license fee (prorated) and cloud- related professional services	E3+E4	\$50,000	\$450,000	\$540,000	\$648,000	
	Risk adjustment	↑15%					
Etr	New Relic license fee (prorated) and cloud- related professional services (risk-adjusted)		\$57,500	\$517,500	\$621,000	\$745,200	

Internal Staff To Support New Relic

The organization dedicated two full-time equivalent (FTE) personnel to support New Relic for public cloud migration.

- One FTE supported and maintained the New Relic platform, and one FTE worked on the public cloud rightsizing.
- > The average fully loaded annual salary was \$150,000.

These costs will vary based on:

- > The skill set of the internal IT team.
- > The extent of the public cloud rightsizing effort.

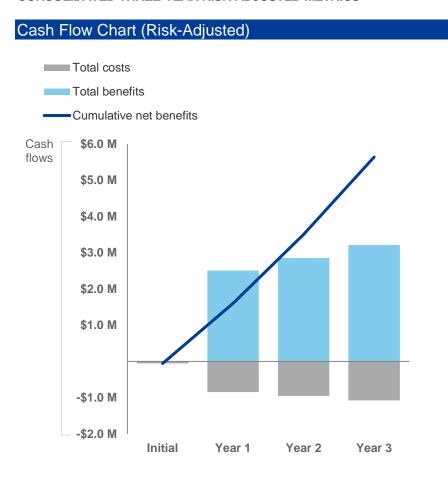
To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year risk-adjusted total PV of \$820,661.

Intern	al Staff To Support New Relic: Calculation Table					
Ref.	Metric	Calculation	Initial	Year 1	Year 2	Year 3
F1	Internal staff to support the New Relic platform (FTEs)			2	2	2
F2	Annual salary, fully loaded			\$150,000	\$150,000	\$150,000
Ft	Internal staff to support New Relic	F1*F2	\$0	\$300,000	\$300,000	\$300,000
	Risk adjustment	↑10%				
Ftr	Internal staff to support New Relic (risk-adjusted)		\$0	\$330,000	\$330,000	\$330,000



Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.



These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$57,500)	(\$847,500)	(\$951,000)	(\$1,075,200)	(\$2,931,200)	(\$2,421,718)
Total benefits	\$0	\$2,508,295	\$2,851,577	\$3,209,536	\$8,569,408	\$7,048,315
Net benefits	(\$57,500)	\$1,660,795	\$1,900,577	\$2,134,336	\$5,638,208	\$4,626,597
ROI						191%
Payback period (months)						< 3

New Relic CAS: Overview

The following information is provided by New Relic. Forrester has not validated any claims and does not endorse New Relic or its offerings.

New Relic One Platform is the industry's first observability platform that is open, connected, and programmable. For engineering teams with complex environments, New Relic One empowers you to find, visualize, and understand everything you need to deliver more perfect software faster. New Relic One is the next evolution of the New Relic platform, and it connects all your data in today's increasingly complex and interdependent systems in a single place.

New Relic Cloud Adoption Solution

New Relic believes that you should be able to track and monitor every aspect of your migration and its benefits, just like you would track any mission-critical development and infrastructure project. To help make that possible, New Relic has announced the New Relic Cloud Adoption Solution (CAS.) CAS is a unique combination of people, processes, and technology designed to manage complexity and give you a thorough understanding of the entire migration process from inception, through planning, and on to implementation and operation. CAS can help you:

- > Plan and prioritize your migration more effectively.
- > Understand the scale of your migration.
- Track the migration process in real time and see its impact on your business performance and bottom-line results.
- Determine if you're meeting the business goals defined during planning are your costs in line with expectations?
- > See how the migration affects your customers.
- » Discover whether the migration is helping your organization react quickly to market changes.

The New Relic Cloud Adoption Solution: A framework for cloud success

Put simply, the New Relic CAS supplies the methodology and a common language for everyone to use when dealing with these complex issues. New Relic has partnered with a community of software vendors and systems integrators that offer the personnel and hands-on expertise required to make your cloud adoption initiative as fast, smooth, and successful as possible.

The CAS ecosystem brings together New Relic and New Relic Expert Services, along with a carefully selected group of systems integrators and software vendors — including RISC Networks, TSO Logic, and Cloudamize — which help with portfolio discovery. Together, New Relic and its partners do the hard work of integrating the technology, building an ecosystem and framework, creating a common language, and developing a content library so that you don't have to stitch together a solution across multiple vendors and service providers.

Getting started with the New Relic Cloud Adoption Solution

To get started, all you need to do is tell New Relic where you are in your cloud migration journey — and the most important goals you want to accomplish. To make the process of getting started even easier, you can begin with selections from a predefined catalog of best practices and dashboards that you can customize to fit your environment. New Relic and its CAS partners have figured out the technology, process, and people aspects to make it happen for you.

Ready to get started? Ask your New Relic team (or complete the Contact Us form here) to tell you more about the Cloud Adoption Solution. Keep in mind that while you can activate the New Relic CAS at any point in your cloud migration, the impact is far greater when you deploy it as soon as you begin thinking about migrating to the cloud.



Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

Total Economic Impact Approach



Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.



Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.



Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.



Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.

Present value (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



Net present value (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made, unless other projects have higher NPVs.



Return on investment (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.



Discount rate

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



Payback period

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.



Appendix B: Endnotes



¹ Forrester expects spending on public cloud infrastructure to grow to \$133 billion in 2022, up from \$46 billion in 2018. Source: "The Public Cloud Market Outlook, 2019 To 2022," Forrester Research, Inc., July 2, 2019.